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Side Event: Ending Deforestation for Cattle Ranching in Amazonia

Title: Secondary forests from agricultural abandonment in Amazonia 2000-2009

Abstract:

Ongoing negotiations to include reducing emissions from tropical deforestation and forest degradation (REDD+) in a post-Kyoto climate agreement highlight the critical role of satellite data for accurate and transparent accounting of forest cover changes. In addition to deforestation and degradation, knowledge of secondary forest dynamics is essential for full carbon accounting under REDD+. Land abandonment to secondary forests also frames one of the key tradeoffs for agricultural production in tropical forest countries—whether to incentivize secondary forest growth (for carbon sequestration and biodiversity conservation) or low-carbon expansion of agriculture or biofuels production in areas of secondary forests. We examined patterns of land abandonment to secondary forest across the arc of deforestation in Brazil and Bolivia using time series of annual Landsat and MODIS data from 2000-2009. Rates of land abandonment to secondary forest during 2002-2006 were <5% of deforestation rates in these years. Small areas of new secondary forest were scattered across the entire arc of deforestation, rather than concentrated in any specific region of the basin. Taken together, our analysis of the satellite data record emphasizes the difficulties of addressing the pool of new secondary forests in the context of REDD+ in Amazonia. Due to the small total area of secondary forests, land sparing through agricultural intensification will be an important element of efforts to reduce deforestation rates under REDD+ while improving agricultural productivity in Amazonia.